

Ethics & Medics

A CATHOLIC PERSPECTIVE ON MORAL ISSUES IN THE HEALTH AND LIFE SCIENCES

Programmed by our Genes?

A topic that has held the attention of both scientists and philosophers over time is the question of human free will and moral accountability. Are human persons capable of free choice and, therefore, responsible for their choices, or are persons not accountable for the moral quality of their actions because all human activity is strictly determined by inexorable laws? Phrasing the question from the perspective of biology, one could ask, Is there a dimension of human personhood that transcends the physical by which we are able to morally define ourselves, or are who we are and what we do determined by our biology? In other words, is the material component of the person the *sufficient* cause of his actions?

More fuel has been added to the fire of this perennial debate with recent advances in genetic medicine, particularly the progress made in mapping the human genome. Tests are now available that can identify the genetic basis for or genetic component of an ever-growing number of diseases. Even more germane to our discussion, is the fact that scientists are beginning to unravel the complex interplay between genes and behavior. There is scientific evidence, for example, to support the theory that low levels of platelet monamine oxidase which is largely dictated by genes have a direct relation to a cluster of behavioral diseases typified by sensation-seeking, e.g., addiction to gambling, alcohol, and drugs.

Learning how genes influence human behavior, then, gives a genetic twist to the question posed at the outset. Are human persons capable of self-determination and moral autonomy despite any gene-based physiological and psychological predispositions, or are we just lumbering robots programmed by our genes?

This article will summarily describe, first, how biological determinists have resolved the question of human free will, second, how Catholic tradition teaches on this matter and, third, how the conclusions of determinists and Catholic teaching square with human experience.

Biological Determinism and Free Will

Biological determinism is a type of physical deter-

minism. According to the latter, every event in the universe is determined by a fixed set of laws that precede and concur with the event. Everything that happens happens in a strictly mathematical manner. In other words, if one knows all the circumstances of a particular situation, one is able to predict the consequences that will follow. According to the chemical reductionism central to biological determinism, the causal laws of the tightly structured nexus of human biology—a nexus that is becoming ever more refined through the advances of human genetics—dictate human behavior. It is illogical within this view of human behavior to require personal responsibility for the moral quality of one's actions; moral accountability makes sense only if actions precede from a free agent.

In the philosophy of biology, there are two kinds of determinism: so-called "hard" or "soft" determinism. The biological determinism just described is an example of the former. According to hard determinism, human free choice is a mere appearance; human life processes and human behavior are exclusively predicated on an individual's chemical makeup. The reductionist neurophysiology of Franz Joseph Galls (1758-1828) is a clear example of how hard determinism can be applied to biological data. Galls linked particular kinds of behavior to specific parts of the brain. Accordingly, the chemical reactions of the brain, regulated by physical laws, are the principle explanation for all human activities.

The Australian neurophysiologist, Sir John Eccles

(continued on page 2)

IN THIS ISSUE

Programmed by our Genes

Genetics and human self-determination

The Unborn and Technology

Medical treatment before birth

(b. 1903), challenged such mechanistic determinism by arguing that an ego, or will, interacts with the brain. "Neurological states," he asserts, "can be changed by consciousness" (*Encyclopedia of Bioethics*, W.T. Reich, ed., 1978, p. 502). By attempting to make room for free will in a reductionistic framework, Eccles identifies himself as a soft determinist. But as John Findlay points out in his book *Psyche and Cerebrum*, the kind of free will to which Eccles and other soft determinists ascribe does not appear to be compatible with traditional notions of moral autonomy and moral accountability.

Free Will in the Catholic Tradition

Christianity, by appeal to revealed truths of faith, was able to implicitly or explicitly confirm what pre-Christian philosophers with the use of unaided reason more or less assuredly concluded. Key Biblical themes—God's call to a covenantal relationship, the fall of our first parents, Jesus' invitation to participation in the kingdom, and the promise of eternal happiness or punishment—presuppose human freedom. To answer the Divine call, one must have the freedom to say yes or no; to merit eternal happiness or punishment, one must be able to choose and to be held accountable for the moral quality of one's choices.

Although the entire Bible alludes to the existence of free will, the Biblical image that most powerfully underscores human free will is the image of a God who freely loves and redeems. God's gift of human freedom, *Gaudium et Spes* reminds us, is an exceptional sign of the Divine image in the human person (#17).

The writing of the Fathers of the Church contain frequent attestations to the person's capacity for free choice. A brief excerpt from the writings of St. Irenaeus is representative of Patristic thought on the matter:

...God made man free from the beginning, so that he possessed his own power just as his own soul, to follow God's will freely, not being compelled by God. For with God, there is no coercion, but a good will is present with him always. He, therefore, gives good counsel to all. In man as well as in angels—for angels are rational—he has placed a power of choice, so that those who obeyed might justly possess the good things which, indeed, God gives but which they themselves must preserve (FEF 244).

The Catholic Church considers belief in the freedom of the human person so fundamental to personal dignity that when Luther and others of the Protestant Reformation partially or totally denied free choice, the Council of Trent solemnly defined that free will was not lost or extinguished by the fall of Adam.

The flip side of the capacity for free choice is personal responsibility for the moral character of what one freely chooses. The Church teaches that when an

action is *freely* posited, i.e., it is performed with no coercion from within or without, and *with sufficient knowledge*, i.e., the person has reflected on and understands the moral quality of what he is choosing, the agent is accountable for the good or evil that is accomplished by the act. Persons who participate in shotgun weddings or acts of theft under hypnosis are not personally responsible for such actions because they were not freely or knowingly performed. Strong emotions that accompany a particular act—fear, desire, anger—can mitigate the extent to which the person is morally responsible for the act, depending on certain givens in one's situation such as education, heredity, environment, and personal moral resources, the options open to one person will be fewer or greater than those open to another.

Mitigating circumstances aside, one is morally responsible for one's free choices in two ways: for the moral good or evil the action accomplishes outside of the agent and for the goodness or evil that the person becomes by virtue of freely performing a moral action. Human persons are responsible for who they become by reason of the character of the actions they freely choose.

Free Will and Human Experience

When we reflect on our activities during any given day, we are conscious of having had to make choices. We were free to do X or Y but could not do both. We had to choose. Furthermore, we are aware that choices have a moral dimension. They involve an acceptance or rejection of one or other basic human good. We are conscious of these types of choices and their effects on our character in the spontaneous reaction or feeling that accompanies their execution. Our conscience upbraids or consoles us according to whether those actions conform to the demands of love that are written on our hearts. We experience a sense of self-worth or fulfillment if good is realized, a sense of guilt or self-destruction if a moral good is denied. We realize that this or that action makes us better or worse persons.

Who of us has not set goals and then actively sought to fulfill those goals? Human persons are not strangers to activities that create, modify, and reform the personal and societal worlds around them. Furthermore, we are aware that these movements of change are initiated and controlled by our decisions and choices.

While the experiential insights mentioned thus far confirm the insights of Catholic teaching on free choice, we will conclude with a datum of experience that corroborates a deterministic perspective. That is the realization that human freedom does have its constraints. Human experience brings us up against all sorts of limitations that affect our choices—our nature, our personal history, our environment, the freedom of others. All of these remind us that,

(continued from page 2)

because of factors beyond our control, an ideal range of possibilities is not always open to us when we choose. A person with a high school education will not be able to choose from professions that require a master's degree; an individual who has never heard of Jesus cannot choose Christianity as the way he worships and relates to God; a person addicted to alcohol is limited in his choice of beverage and social recreations.

But where the determinists are wrong is in their conclusion that the existence of conditioning factors in some areas of a person's life negates *any* exercise of free choice, that certain factors beyond one's control preclude personal goal-setting and goal-seeking. What the determinists fail to see and what the Catholic tradition recognizes is that even though cer-

tain givens in life may limit our freedom, we are still free to choose within those limits.

Human experience also confirms this truth. In our own lives and in the lives of others, we see how the human power of free choice is capable of transcending genetic predisposition, environment, and natural necessity. When the power of love, fortified by the freedom of faith, informs the human will one could conjecture about what a person might do in a certain instance, but such prediction would be a moral, not a physical, certitude. We are free agents capable of heroic behavior, not mechanistic robots restricted by our physical or genetic makeup.

Sister Renée Mirkes, O.S.F., M.A.
Pope John Center Consultant
